



Science Toolkit: Grade 6 Objective 3.F.1.a

Student Handout: Science: Grade 6 Objective 3.F.1.a

Standard 3.0 Life Science

Topic F. Ecology

Indicator 1. Give reasons supporting the fact that the number of organisms an environment can support depends on the physical conditions and resources available.

Objective a. Explain that populations increase or decrease relative to the availability of resources and the conditions of the environment.

Selected Response (SR) Item

Question

Use the information below to answer the following:

Sheep Challenge Evolution

A species of sheep lives on the Scottish island of Hirta. Hirta has plenty of grass for the sheep to eat, and no natural predators of the sheep live on the island. Some sheep have dark wool, and some have light wool. The sheep with dark wool tend to be much larger and stronger than the sheep with light wool. However, researchers have found that in the last 20 years, the sheep with light wool have increased in number. Usually, strength and size help animals survive and breed.

A new sheep predator is introduced to the island.

Which change to the sheep population will most likely occur first?

- A. a decrease in the population of sheep with dark wool
- B. a decrease in the population of sheep with light wool
- C. an increase in the population of sheep with dark wool
- D. an increase in the population of sheep with light wool

Correct Answer

B. a decrease in the population of sheep with light wool

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